

What is claimed is:

1 1. A fixation device at least partially implantable into tissue, comprising:
2 a shaft having an outer face;
3 a threaded portion wound around the outer face and forming a helical groove, at
4 least a part of the threaded portion being implantable into tissue, the threaded portion
5 comprising:
6 a first face having:
7 a first end portion in curved contact with the outer face;
8 a second end portion opposite the first end portion;
9 a second face having:
10 a third end portion in curved contact with the outer face;
11 a fourth end portion opposite the third end portion;
12 a third face, the third face being coupled to the second end portion and the
13 fourth end portion and being substantially parallel with the outer face.

1 2. The fixation device according to Claim 1, wherein third face is in curved
2 contact with at least one of the second end portion and the fourth end portion.

1 3. The fixation device according to Claim 1, wherein the third face contacts
2 the second end portion at a first point, and the third face contacts the fourth end portion at
3 a second point.

1 4. The fixation device according to Claim 1, wherein an angle formed by the
2 plane of the outer face and the plane of the second face is between substantially 85
3 degrees and substantially 125 degrees.

1 5. The fixation device according to Claim 1, wherein an angle formed by the
2 plane of the outer face and the plane of the first face is between substantially 95 degrees
3 and substantially 140 degrees.

1 6. The fixation device according to Claim 1, wherein a distance between the
2 plane of the outer face and the plane of the substantially parallel third face is between
3 substantially 0.25 millimeters and substantially 3 millimeters.

1 7. The fixation device according to Claim 1, wherein a region forming the
2 curved contact between the first end portion and the outer face has a radius of at least
3 approximately 0.15.

1 8. The fixation device according to Claim 1, wherein a region forming the
2 curved contact between the second end portion and the outer face has a radius of at least
3 approximately 0.08.

1 9. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form a dental implant, and wherein a distance between the first face, at a region
3 forming the curved contact between the first end portion and the outer face, and the
4 second face, at a region forming the curved contact between the third end portion and the
5 outer face, is between approximately 0.20 millimeters and 2.00 millimeters.

1 10. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form an orthopedic implant, and wherein a distance between the first face, at a
3 region forming the curved contact between the first end portion and the outer face, and
4 the second face, at a region forming the curved contact between the third end portion and
5 the outer face, is between approximately 0.20 millimeters and 6.00 millimeters.

1 11. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form a dental implant, and wherein a distance between the third face and the outer
3 face is between approximately 0.25 millimeters and 3.00 millimeters.

1 12. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form an orthopedic implant, and wherein a distance between the third face and
3 the outer face is at least approximately 0.25 millimeters.

1 13. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form a dental implant, and wherein a distance between the second end portion and the
3 fourth end portion on an adjacent thread is between approximately 0.30 millimeters and 3.00
4 millimeters.

1 14. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form an orthopedic implant, and wherein a distance between the second end portion
3 and the fourth end portion on an adjacent thread is between approximately 0.30 millimeters
4 and 8.00 millimeters.

1 15. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form a dental implant, and wherein a length of the third face is between
3 approximately 0.25 millimeters and 3.00 millimeters.

1 16. The fixation device according to Claim 1, wherein the shaft and threaded
2 portion form an orthopedic implant, and wherein a length of the third face is between
3 approximately 0.25 millimeters and 6.00 millimeters.

1 17. The fixation device according to Claim 1, wherein the threaded portion has at
2 least one transverse slot along at least a portion thereof.

1 18. A dental implant at least partially implantable into oral tissue, comprising:
2 a shaft having an outer face;
3 a threaded portion wound around the outer face and forming a helical groove, at least
4 a part of the threaded portion being implantable into the oral tissue, the threaded portion
5 comprising:
6 a first face having:
7 a first end portion in curved contact with the outer face;
8 a second end portion opposite the first end portion;
9 a second face having:
10 a third end portion in curved contact with the outer face;
11 a fourth end portion opposite the third end portion;
12 a third face, the third face being coupled to the second end portion and the
13 fourth end portion and being substantially parallel with the outer face.

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- 1 19. A fixation device at least partially implantable into tissue, comprising:
2 a shaft having an outer face;
3 a plurality of fin sections disposed along at least a portion of the length of the other
4 face, each of the fin sections being coaxial with the shaft and having a diameter greater than
5 the diameter of the outer face at the disposed location, each of the fin sections comprising:
6 a first face having:
7 a first end portion in curved contact with the outer face;
8 a second end portion opposite the first end portion;
9 a second face having:
10 a third end portion in curved contact with the outer face;
11 a fourth end portion opposite the third end portion;
12 a third face, the third face being coupled to the second end portion and the
13 fourth end portion and being substantially parallel with the outer face.

- 1 20. The implant device according to Claim 19, wherein the shaft and the plurality
2 of fin sections form a dental implant.